



SAFETY DATA SHEET

LPS F-104 Solvent/Degreaser Bulk Liquid

Revision 6

Revision Date 29/5/07

Supersedes: 23/12/05

Section 1 – Identity of the Substance/Preparation and Company/Undertaking

Product Name: LPS F-104 SOLVENT / DEGREASER (BULK LIQUID)

Part Numbers: M49005, M49025, M49205

Product Use: A solvent degreasing agent for removing grease, oil and other residues from metal and other hard surfaces.

Supplier: Geocel Limited, Western Wood Way, Langage Science Park, Plympton, Plymouth, PL7 5BG United Kingdom

TEL: +44 (0)1752 202060

FAX: +44 (0)1752 334384

In Case of Emergency: +001 703-527-3887

Manufacturer: LPS Laboratories, 4647 Hugh Howell Rd., Tucker, GA 30085 (U.S.A.)
<http://www.lpslabs.com>

Section 2 – Hazards Identification

Human and Environmental Hazards

This preparation is considered hazardous according to European Union Directives 67/548/EEC and 1999/45/EC.

Flammable. Irritating to eyes and skin. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed.

Inhalation of concentrated petroleum distillate mist or vapours can cause central nervous system (CNS) depression. This product may combust when subjected to high energy ignition sources.

Section 3 – Composition / Information on Ingredients

| INGREDIENT NAME | EC No. | CASRN | Classification | Weight Percent |
|---|-----------|------------|------------------------------------|----------------|
| Solvent Naphtha (petroleum), medium aliphatic | 265-191-7 | 64742-88-7 | [F] R10; [Xn] R65; | 70 - 80% |
| 2-methoxy-1-methylethyl acetate | 203-65-6 | 108-65-6 | [F] R10; [Xi] R36; | 5 – 10% |
| 1-propoxypropan-2-ol | 216-372-4 | 1569-01-3 | NC | 5 – 10% |
| d-limonene | 227-813-5 | 5989-27-5 | [F] R10; [Xi] R38, R43; [N] R50/53 | 5 – 10% |

Section 4 – First Aid Measures

Eyes: Liquid contact may cause irritation. Flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if irritation persists.

Skin: Wash with soap and water. Get medical attention if irritation persists.

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen and get medical attention. If not breathing, give artificial respiration and get medical attention.



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Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended. Seek medical attention immediately.

Section 5 – Fire Fighting Measures

Products of Combustion: carbon monoxide and carbon dioxide.

General Fire Hazards: While this material is not considered flammable, high heat will cause product to boil, evolving vapour that could cause explosive rupture of closed containers.

Firefighting media: SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosions.

Sensitivity to Impact: None. **Sensitivity to Static Discharge:** None.

Protection Clothing (Fire): wear protective clothing and equipment suitable for the surrounding fire, including helmet, face mask, and self-contained breathing apparatus.

Section 6 – Accidental Release Measures

Precautions to protect environment: Do not allow entry into drains or watercourses. If this occurs inform the local authorities at once.

Spill Cleanup methods: Eliminate all sources of ignition and ventilate area.. Use an absorbent material, eg sand, to mop up residues. See section 13 'Disposal Considerations'.

Section 7 – Handling and Storage

Storage Precautions: Keep in original container at ambient temperatures. . Keep container closed.

Section 8 – Exposure Controls / Personal Protection

| Component | EC No. | UK LT EXP (8 hrs.) | UK ST EXP (15 min.) | ACGIH STEL |
|---|-----------|--------------------|---------------------|---|
| Solvent Naphtha (petroleum), medium aliphatic | 265-191-7 | 300 ppm | Not Established | 100 ppm ACGIH-TLV |
| 2-methoxy-1-methylethyl acetate | 203-65-6 | 100 ppm | Not Established | Not Established |
| 1-propoxypropan-2-ol | 216-372-4 | Not Established | Not Established | Not Established |
| d-limonene | 227-813-5 | Not Established | Not Established | Not Established |
| Carbon Dioxide | 204-696-9 | 5000 ppm | 15000 ppm | 5000 ppm ACGIH-TLV 30000 ppm ACGIH-STEEL |

Engineering measures Normal room ventilation is usually adequate. If necessary, use appropriate local exhaust ventilation to keep exposures below the regulated limits.



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Personal protective equipment

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| Eye protection | Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended. |
| Hand protection | Use protective gloves conforming to appropriate regulations. Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves. Take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and the contact time. |
| Respiratory protection | Typical use of this product under normal conditions does not require the use of respiratory protection. |
| Hygiene measures | Do not soak clothing with this product and continue working without immediately changing clothes and washing skin. Do not reuse clothing until it has been laundered. An eyewash fountain should be available in the work area. |
| Environmental exposure controls | Soak up puddles of product with absorbent material and dispose of according to local regulations. Ventilate area to reduce worker exposure to vapours and prevent accumulation of explosive vapour concentrations. |

Section 9 – Physical and Chemical Properties

| | | | |
|--------------------------------------|----------------------------|---|-----------------------------------|
| Appearance: | Clear liquid. | Colour: | Colourless |
| Odour/Taste: | Fruity orange. | Vapour Pressure: | < 0.7kPa (at 20 °C) |
| Solubility Description: | Slightly soluble in water. | Evaporation Rate: | 0.15 (BuAc=1) |
| Boiling Point (°C): | >150 @ 101 kPa | Flash Point (°C): | 40°C |
| Specific Gravity (Water=1): | 0.77-0.79 @ 20 °C | Flash Point Method: | Tag-Closed Cup. |
| Vapour Density (air=1): | 4.8 | Auto Ignition Temperature (°C): | Not Established |
| V.O.C. Content: | 810 g/L | Partition Coefficient (octanol/water): | <1 |
| Flammable limits (estimated): | LOWER: 0.7% UPPER:6% | Viscosity: | <3 mm ² /second @ 25°C |
| pH: | Not applicable | | |

Section 10 – Chemical Stability and Reactivity

| | |
|----------------------------------|--|
| Chemical Stability: | Product is stable under recommended storage conditions. |
| Conditions to Avoid: | Exposure to direct sunlight for extended periods. Temperatures in excess of 50°C. |
| Incompatibility: | Reactive or incompatible with oxidizing agents. |
| Hazardous Decomposition: | Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include carbon monoxide and carbon dioxide. |
| Hazardous Polymerization: | Will not occur. |



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Section 11 – Toxicological Information

Acute and Chronic Toxicity

A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

| Ingredients | EC No. | LC-50 | LD-50 |
|---|-----------|-------------------------------------|--|
| Solvent Naphtha (petroleum), medium aliphatic | 265-191-7 | >5500 mg/m ³ rat 4 hours | > 5000 mg/kg rat oral. 3000 mg/kg rat dermal. |
| 2-methoxy-1-methylethyl acetate | 203-65-6 | Not established | 8532 mg/kg (oral, rat) >5000 mg/kg (dermal, rabbit) |
| 1-propoxypropan-2-ol | 216-372-4 | Not established | 4 ml./kg (dermal, rabbit), 2000 mg/kg (oral, rat) |
| d-limonene | 227-813-5 | Not established | >5g/kg (oral, rabbit) >5g/kg (dermal, rabbit) |

Section 12 – Ecological Information

| | | | |
|-----------------------------------|--|---------------------------------------|------------------------------|
| Mobility: | Semi-volatile. Readily absorbed into soil. | Persistence and degradability: | Only slightly biodegradable. |
| Bioaccumulative potential: | No bioaccumulation potential | Other adverse effects: | None known. |

Component Information

Acute Aquatic Toxicity

| Component | EC No. | Test | Species | Results |
|---|-----------|--------------------------|---------------------------|-----------------|
| Solvent Naphtha (petroleum), medium aliphatic | 265-191-7 | 48-hour EC ₅₀ | Daphnia magna | Not established |
| | | 96-hour EC ₅₀ | Microcystis pyrifera | Not established |
| 2-methoxy-1-methylethyl acetate | 203-65-6 | 48-hour EC ₅₀ | Daphnia magna | Not established |
| | | 96-hour EC ₅₀ | Microcystis pyrifera | Not established |
| 1-propoxypropan-2-ol | 216-372-4 | 48-hour EC ₅₀ | Daphnia magna | 3600 mg/L |
| | | 96-hour EC ₅₀ | Selenastrum capricornutum | 1466 mg/L |
| d-limonene | 227-813-5 | 48-hour EC ₅₀ | Daphnia magna | Not established |
| | | 96-hour EC ₅₀ | Microcystis pyrifera | Not established |

Section 13 – Disposal Considerations

Disposal: Waste must be disposed of in accordance with national and local environmental control regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate.



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Section 14 – Transportation Information

| | | | | |
|--------------------------|---------------|------|----------------|---|
| Road/Rail - ADR/RID : | UN no: | 1993 | ADR Class: | 3: Flammable liquids. |
| | Packing Group | III | Shipping name: | Flammable liquid, n.o.s. (Naphtha Petroleum) |
| | Labelling: | 3 | | |

| | | | | |
|----------|----------------|-----------------------------|-----------------|-------------------|
| IMDG-IMO | UN no: | 1993 | Class: | 3 |
| | Shipping Name: | Flammable liquid, n.o.s. | Packing Group: | III |
| | EmS: | F-E, <u>S-E</u> | Technical Name: | Naphtha Petroleum |

| | | | | |
|------------|--------------------------|-----------------------------|-----------------|-------------------|
| IATA-ICAO: | UN no: | 1993 | Class: | 3 |
| | Proper Shipping Name: | Flammable liquid, n.o.s. | Labeling: | Flammable Liquid |
| | Packing Group: | III | Technical Name: | Naphtha Petroleum |

Section 15 – Regulatory Information

Warning Symbol(s): Xi, N

| | | |
|---------------------|---------|--|
| Risk Phrases | R-10 | Flammable |
| | R 36/38 | Irritating to eyes and skin. |
| | R-43 | May cause sensitization by skin contact. |
| | R-50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| | R-65 | Harmful: may cause lung damage if swallowed. |

| | | |
|------------------------|---------|---|
| Safety Phrases: | S-2 | Keep out of the reach of children. |
| | S-23 | Do not breathe vapour. |
| | S 24/25 | Avoid contact with skin and eyes. |
| | S-37 | Wear suitable gloves. |
| | S-60 | This material and its container must be disposed of as hazardous waste. |
| | S-61 | Avoid release to the environment. Refer to special instructions/safety data sheets. |
| | S-62 | If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. |

Contains naphtha.



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Section 16 – Other Information

User Notes:

The purpose of the above information is to describe this product only in terms of Health and Safety requirements. The information given therefore, should not be construed as guaranteeing specific properties or specification. Customers should satisfy themselves as to the suitability and completeness of this information for their own particular use, bearing in mind any other Health and Safety legislation or regulations. The information and recommendations in this publication are to the best of our knowledge reliable. However, nothing herein is construed as a warranty or representation. Statements concerning the use of the products described herein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is to be assumed.

Information

ESIS: European Chemical Substances Information

Sources:

HSE EH40 Occupation Exposure Limits. Suppliers Safety Data Sheets.

Full R-Phrases

| | |
|---------|--|
| R-10 | Flammable |
| R-38 | Irritating to skin. |
| R-43 | May cause sensitization by skin contact. |
| R-50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R-65 | Harmful: may cause lung damage if swallowed. |